Departmental Response to the Water Supply and Distribution Program (312) Review FY 2003/2004

Program Outcome Measure Findings and Recommendations

rogram outcome	Measure Findings and Recommend	L			
Outcome Level Program-Wide Issue	Measure s	Summary of Findings Auditors noted a disconnect between Program performance targets and resource allocation in planning for critical tasks such as maintenance and repairs.	, ,	Department Response Staff agrees with the auditors' assessment. However, due to budget cuts and service level reductions instituted by Council, meeting best management practices on maintenance and repairs was not possible during FY 03/04.	Disposition Consider appropriate service level in budget.
Program-Wide Issues		The Program lacks an automated work order system capable of generating reports and tracking Program activities.	a work order tracking system a top priority. In the interim, the Program needs to develop documentation systems that track services provided and products generated.	Staff agrees with the auditors' assessment. Before budget cuts were instituted, management was working on a work-order and asset management system and a GPS data collection hardware. When cuts were implemented in 2003 due to budget deficits this work was stopped and ITD implemented a service request system that to this date is not completely adequate to the Division's needs.	Implement appropriate work order tracking system.
Program-Wide Issues		Auditors found many logs were not properly maintained and did not reconcile with reported results.		Staff agrees with the auditors' assessment. Even though SOPs did not require staff to maintain logs, Management came to the conclusion that time cards (required by SOPs) did not accurately capture all the information in specific detail that works best for the program. Staff are currently maintaining logs.	
Program Measure 1 - City water rates, weighted by user category, are five percent let than the Bay Area average as determined by Bay Area Water users Association surveys. Reported Result: 32.4%	user category, are five percent less than the Bay Area average as	The measure wording is misleading. This measure only looks at residential water rates.	Staff should revise the measure wording to reflect only residential water rates are being reported.	Staff revised this measure for FY 04/05. One of the proposed changes made was to change wording to "residential rates."	Implemented.
		The measure and its reported result do not provide an adequate context for the reader to assess Sunnyvale's performance. The measure should include the Bay Area average in order for the reader to interpret the percentage result. However, staff stated the budget structure in place in FY 2003/2004 did not allow them to report both numbers.	The new FY 2005/2006 budget structure being implemented City-wide will allow the Program more flexibility in reporting information. Since the Bay Area average changes from year to year, the reported result in the new budget should be amended to include two lines: one providing Sunnyvale's actual average and the other Sunnyvale's percentage difference from the Bay Area average.	Staff removed this measure from the Water program structure. We felt this was not an appropriate measure for the program, and chose other measures that better reflect aspects of our water distribution and supply system.	Concur with removal of measure.
		3. The reported percent should either be positive or negative. In this case, Sunnyvale's rate is 32.4% less, so it should appear as "(32.4%) or -32.4%," otherwise it appears Sunnyvale's usage rate is 32.4% above the Bay Area average.	3. Results should be reported showing whether the value is positive or negative.	In principle, staff agrees with this IF no index is utilized for measuring the success of the measure. Negative indexes detract from the total index and penalize the program.	Measure removed in new structure.
		4. The current SOP does not reflect actual practice.	The SOP needs to be updated to reflect residential user categories are the only categories used in this measure. The phrase, "weighted by user category" should be deleted from the measure's text as only residential water rates are compared and the weighting is performed by BAWSCA.	Staff proposed a revised measure for FY 04/05.	Measure removed in new structure.

Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition
Program Measure	2 - The number of hours customers are without water service is at the previous three year average. Reported Result: Current Year – 6	Staff did not record actual times when water was turned off and on for service.		Staff was recording only those occurrences in which the time customers spent without water was greater than 30 minutes. This did not provide information on actual time customers were without water, and the new log was instituted.	New log instituted.
		This measure does not provide a stable service level goal. It measures success by previous years' results, which assumes the previous years' results were at an acceptable level.	The Program should assess what an appropriate service goal is in relation to its policies and/or industry standard service levels and change the measure accordingly.	New structure does not have this particular measure. Another measure regarding restoration of water services will be used.	New structure replaces measure.
		3. The current SOP methodology does not reflect actual practice. The Department reports the three year average for the total number of hours water is turned off and the total number of hours customers are without water for the current year.	The SOP should be updated to reflect current practice.	New SOP reflects current practice.	Implement.
Program Measure		The measure wording can be misleading. Stating the Water Program is in compliance with health and water quality regulatory agencies 100% of the time, implies the Water Program is being monitored 100% of the time.	proposing new text for the measure in the FY 2005/2006 budget restructure. The new measure	No response needed.	Resolved in new structure.
		The SOP does not instruct staff on how to calculate the reported result.	develop the SOP for the new measure making sure it clearly instructs staff how to track and calculate the	instructions for tracking and calculating measure's	Auditors will work with staff and review new SOP.
		The Program calculates the reported result from the annual DHS report which summarizes the number of notices sent to the City for noncompliance during the year. This report is based on the calendar year, which does not match Sunnyvale's fiscal reporting structure.	None. This issue has been addressed by the new measure.	No response needed.	Resolved in new structure.

Outcome Level Program Measure		Summary of Findings 1. The measure does not represent an average, as the measure indicates, but total water usage.	Summary of Recommendations 1. None. The new FY 2005/2006 measure makes this finding obsolete. The new measure reads: "Gross per capita water usage, based on purchases from Sunnyvale's three potable sources (SFPUC, SCVWD, groundwater) shall not exceed the average of the previous five years, exclusive of drought years."	Department Response Staff feels that the new measure better reflects water conservation objectives of the General Plan.	Disposition Resolved in new measure.
	Percent below baseline during drought years – 0%	The baseline amount is not included in the measure text. Including the baseline is necessary to preserve this number and to provide context for Sunnyvale's water usage.	None. The FY 2005/2006 budget restructure requires target and baseline amounts to be reported to give the new measures context.	No response needed.	Resolved in new structure.
		By providing percentages for both non-drought and drought years, it appears that both are occurring at the same time.	-	New measure excludes drought years.	Resolved in new structure.
		4. The numbers to calculate the result were divided in the wrong direction. Program staff divided the baseline year amount by the current year amount rather than the current year by the baseline year.	 Program staff should review calculations prior to submitting year-end results and make sure that they reconcile with recorded numbers. 	Managers will audit final calculations for accuracy before submitting year-end results.	Implement. Clarify calculation procedures in SOP,
		The result on the calculation sheet provided to auditors was correct, but does not match the reported result in the MBO.	 Program staff should create calculation sheets at the time results are reported to Budget and archive these sheets with source data. 	Agree.	Implement.
		 The stated usage goals may not accurately reflect the Program's intent. This measure originally had a usage goal of 15% below the baseline during periods of drought. 	None. This measure is being changed in the FY 2005/2006 budget restructure.		Resolved in new budget structure.
Program Measure	5 – A customer satisfaction rating of 80% for Water Supply and Distribution is achieved. Reported Result: 85%	The reported result includes "favorable," but not "neutral" responses. While the City does not have a standard with regards to what categories of response should be included in customer satisfaction survey results, audit staff has observed that many programs report the combined number of "favorable" and "neutral" responses when reporting for these types of measures.	results for this measure as they are understating their performance when compared to many other City programs.	Staff agrees with the auditors. The Program will adopt whatever method is established for the whole City.	Implement.
Program Measure	7 - The Budget/Cost Ratio (planned cost divided by actual cost) is at 1.0. Reported Result: 0.97	The SOP instructs staff to calculate a percentage, not a ratio. The measure SOP states that the planned budget is divided by the actual budget and multiplied by 100.	None. The Budget/Cost ratio measures were eliminated in the FY 2005/2006 budget restructure.	No response needed.	Measure eliminated.

Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition
	8 – 85% of the annual identified recycled water users are connected to the recycled water system. Reported Result: 104.9%	The measure wording does not reflect what is actually being measured. The reported result reflects water consumption versus production, not connections to the recycled water system.	None. This measure has been eliminated in the FY 2005/2006 budget restructure. The new measure is "Recycled water customers are retested every four years for cross-connection control."	No response needed.	Resolve with new measure.
		There is a discrepancy between the calculation sheet provided to summarize water consumption and the source documentation.	Staff needs to reconcile source documents with calculation sheets.	Agree	Implement.
			Calculation sheets need to be created at the time results are reported to Budget and these sheets should be archived with source documents. Staff needs to reconcile calculations with what is reported in the MBO and correct any misreporting.	Agree.	Implement.
	During years when non-contract pricing is available, the average acre foot cost of Santa Clara Valley Water District purchased water is at 95% of contract pricing. Reported Result: 99.61%	The measure has a structural flaw in that the more water purchased by the Program, the better the reported result. Program staff stated they have not met this measure in recent years due in part to their conservation efforts, resulting in less noncontract water being purchased.	The Program needs to develop a measure that actually gauges their efforts to purchase the cheapest water source available. Staff should consult with auditors in developing this measure.	Staff has developed a measure in the new program.	Auditors will work with staff to review new measure.
		The SOP does not accurately reflect the practices of the Program or the measure.	Revise the SOP to reflect actual practice.	The SOP for the new measure will reflect actual practice.	Implement.
		The calculation methodology applied results in a slight understatement of Program performance.	Staff should use expenditures for contract water, not the total expenditures for administering this portion of the Water Program when calculating annual savings on contract pricing.	Agree. The new measure uses only water purchase costs.	Implement.
		The measure is only calculated at the end of the year and as such is not a tool for managing this resource	Staff should structure the measure so that it measures their efforts throughout the year. For example, staff could combine quarterly results to arrive at an annual performance level.	Water usage was reviewed monthly in the past. Staff has now adopted the practice of reviewing source water purchases biweekly to better manage water purchasing so as to meet contract obligations and obtain best prices for the City. The SOP will be revised to reflect new practice.	Implemented.

Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition	
Service Delivery Measure 31201	2 – Contracts for water supply meet projected commitments for three	There is no element of performance in this measure as it does not insure contracts meet actual demand, only projected demand.	The measure has been eliminated in the FY 2005/2006 budget restructure. Staff should work with auditors to develop a measure for the quality of the Program's water supply projections.	Agree. A new measure on average contract cost per acre foot has been developed.	Implement.	
Service Delivery Measure 31201	3 – Water distribution system pressure is maintained between 40 – 105 psi 90% of the time. Reported Result: 97.8%	The current wording of the measure does not accurately reflect what the Program has been measuring each year.	Program staff should consult with auditors on a calculation methodology for this measure when the SCADA system becomes operational (sometime in FY 2005/2006). The current calculation methodology does not sufficiently address how to calculate a result, specifically with regards to defining the unit of measurement.	Staff will work with auditors to develop a new measure using the new SCADA system.	Implement.	
Service Delivery Measure 31201	4 – 85% of the annual identified recycled water users are connected to the recycled water system. Reported Result: 104.9%		This SDP measure is a duplicate of Progran	n Measure 8.		
Service Delivery Measure 31201	5 – Average single family potable water usage is 5% below the 1987 baseline during periods of drought and no higher than baseline at all other times. Reported Result: 130.51%	Program staff stated after SDP Measures 31201-5 and 31201-6 were developed they realized the information they had from 1987, the baseline year, was not disaggregated by single and multi-family use. Therefore, they can only compare total usage between the current year and the baseline year.	None. This measure is being changed in the FY 2005/2006 budget restructure and will be a duplicate of Program Measure 4.		Resolved in new program measure.	
Service Delivery Measure 31202	The number of hours customers are without water service is at the previous three year average. Reported Result: Current Year – 6 Three Year Average – 23.67		This SDP measure is a duplicate of Program Measure 2.			
Service Delivery Measure 31202	2 – Water service is restored within 24 hours on emergency repairs 90% of the time and within 48 hours for all other repairs. Reported Result: Percent of Emergency Repairs – 100% Percent of All Other Repairs – 100%	emergency repairs.	None. The Program is now tracking the actual time the water is turned off. Auditors reviewed the new log being used to tack this measure and found it sufficient.	See answer to Program Measure 2.	New log implemented.	
		2. This measure's results are not adequately described with a percentage. There are two major problems with reporting results for this measure by means of a percentage.	2. Although this measure has been changed in the FY 2005/2006 budget restructure and the total number of repairs will be reported, auditors recommend that an additional line be added in the new structure to either report the average or median time it takes to restore water service. Adding an average or a median time to the reporting structure will give management a better indication of actual performance.	See answer to Program Measure 2, item 2.	Hold pending implementation of a new maintenance management system.	

Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition
	3 – Scheduled maintenance is conducted as planned 90% of the time. Reported Result: 51.5%	The SOP does not reflect current practice with regards to the planning, tracking or measurement of maintenance.	The Program needs to determine the appropriate level of maintenance to maintain and best preserve City assets and budget and plan to meet that service level. The measure wording needs to reflect what is actually being measured. The SOP needs to be revised to reflect actual practice with regards to	See answer to Program-wide Issue No. 1.	See Program-wide Issue No. 1.
			planning, tracking and measuring results.		
		Staff could only produce maintenance logs for regular and Recycled Water (RW) "Manual Valves" and "Blowoffs."	Staff should collect and use the results from all preventative maintenance activities in reporting results for this measure.	Staff agrees with this and has included this recommendation in the new program measures.	Implement.
Service Delivery Measure 31202	Backflow detector checks are conducted as planned 90% of the time. Reported Result: 96%	Documentation provided was not sufficient for auditors to confirm the number of tests completed.	Staff needs to work with auditors in the implementation phase of the audit to develop a process for tracking and reporting results for this measure	Agree.	Implement.
	·	The SOP methodology for tracking and reporting results for this measure is not adequate.	See Recommendation #1. The Program should change the SOP to instruct staff in the new procedure.	The new SOP will provide adequate instructions on the new procedure to staff.	Implement.
		Staff mistakenly used hours instead of products to calculate the reported result.	Management should check staff calculations for Budget Progress Reports or have another staff member check these calculations prior to submitting results.	Managers will audit final calculations for accuracy before submitting year-end results.	Implement.
	-	There is a discrepancy between the calculation sheet the Program provided to auditors and the result reported in the MBO.	Staff needs to create calculation sheets when results are submitted in the annual performance report. Staff should reconcile calculations with the reported results in the MBO and correct any misreporting.	Agree.	Implement.
Service Delivery Measure 31202	5 – The Water Program is in compliance with all health and water quality regulatory agencies 100% of the time. Reported Result: 100%		This SDP measure is a duplicate of Prograr	n Measure 3.	
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Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition
Service Delivery Measure 31202	6 – Water system infrastructure projects are completed as planned 80% of the time. Reported Result: 100%	The measure wording is too vague, does not provide useful information to Program staff.	The Program needs to determine what they are trying to measure - how often/much projects are delayed or how long projects take to complete. For example, the Program could report on the average time projects are delayed before being started. Or, the Program could report on the actual time it took to complete a project versus the budgeted time to complete the project. Management needs to evaluate what information is needed and consult with auditors to develop a new measure.		Measure eliminated.
		Using a percentage to report the measure results is not appropriate given the relatively few numbers of CIP projects.		No response needed.	Measure eliminated.
		The SOP does not sufficiently define terms within the measure and does not provide clear direction on how to calculate the measure results.	Staff needs to develop an SOP that clearly defines the terms in this measure and provides detailed instruction on how to calculate the reported result. This will be dependent on what measure is developed.	No response needed.	Measure eliminated.
	A customer satisfaction rating of 80% for Water Supply and Distribution is achieved. Reported Result: 85%		This SDP measure is a duplicate of Program	n Measure 5.	
Measure 31203	2 - The number of water supply and distribution complaints per 1,000 services is at the previous three year average. Reported Result: 9,09	This measure has no stable service level goal and the three-year average is not reported so there is no basis for comparison.	Program staff should set the measure's performance goal using actual policy and/or industry standard service levels. This will eliminate the need for a three year average.	Agree. New measure's goal is based on AWWA survey.	implement.
	0.00	The SOP does not provide clear instructions on how to calculate the result.	Audit staff recommends the Program use fiscal year data produced by the City's Utility Billing Collection, and Revenue Program for calculating this measure. The SOP should be revised to specify this information		Implement.
		The result from the calculation sheet provided by the Program does not match the reported result in the MBO.	Staff should create calculation sheets at the time they report results in the MBO. These sheets should be filed with source documents. Staff should reconcile calculated results with the MBO and resolve any discrepancies when they are discovered.	Agree.	Implement.

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Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition		
Service Delivery Measure 31203	3 - City water rates, weighted by user category, are five percent less than the Bay Area average as determined by Bay Area Water Users Association surveys.	This SDP measure is a duplicate of Program Measure 1.					
officity 212100	Reported Result: 32 4%	No findings to note	IN/A	No response needed.	IN/A		
Activity 312100	San Francisco Water Department (Hetch-Hetchy). Product: An Acre Foot of Water. Reported Result: 10,734 Acre Feet of Water.	No findings to note.	N/A	No response needed.	IN/A		
Activity 312110	Santa Clara Valley Water District (SCVWD). Product: An Acre Foot of Water. Reported Result: 11,555	No finding to note.	N/A	No response needed.	N/A		
Activity 312120	Acre Feet of Water City Wells. Product: An Acre Foot of Water. Reported Result: 1,425	No finding to note.	N/A	No response needed.	N/A		
	Acre Feet of Water	There is a discrepancy between source documents and the reported products.	Staff needs to reconcile source documents with reported products.	See answer to Program Measure 8, Issue No. 3.	Implement.		
ctivity 312140	SCADA System Operation. Product: Work Hours. Reported Result: 5.080.40	The product for this Activity is a work hour. Auditor	The product for this Activity is a work hour. Auditors do not reconcile activities for which the product is a work hour because there is no practical method by which to verify that the hours were worked.				
Activity 312150	Demand Management. Product: Work Hours. Reported Result: 1.075 Hours	The product for this Activity is a work hour. Auditor	The product for this Activity is a work hour. Auditors do not reconcile activities for which the product is a work hour because there is no practical method by which to verify that the hours were worked.				
Activity 312160	Administration. Product: Work Hours. Reported Result: 1,701.25	The product for this Activity is a work hour. Auditor	rs do not reconcile activities for which the product is a w hours were worked.	vork hour because there is no practical method by whi	ch to verify that the		
activity 312200	Preventative Maintenance. Product: A Preventative Maintenance Activity Completed. Reported Result: 7,990	The product counts from logs provided for activities do not reconcile with MBO reported results.		Staff agrees with auditors that these are good practices and will implement them with new program.	Implement.		
			Staff should maintain logs for maintenance activities on a daily basis and use these logs to track and report products for these activities. At a minimum, logs should include columns for the date, the initials of staff performing maintenance, a brief description of what was done, and I.D. number or other designation for the part or item serviced, and a comments field for any follow-up.	Staff has utilized map books in the past to keep track of maintenance, which is not easy for auditors to check. Logs have been started already and will include pertinent information.	Implement.		
Activity 312210	Corrective Repairs. Product: A Corrective Repair Completed. Reported Result: 4,912	Only timecards are used to document this activity.	1. As suggested in the Summary of Findings, the Program needs to procure and install a work order monitoring system. In the interim, the Program needs to develop a log for this activity. The log should include columns for the date, the initials of staff performing maintenance, a brief description of what was done, an I.D. number or their designation for the part or item serviced, and a comments field for any follow-up.	At this time, the work order system available to us does not give us the means for monitoring repairs adequately. Because of budget constraints there is no timeline to acquire another system. In the meantime, any repairs made are hand annotated on block maps and reported on a monthly basis.	implement log.		

Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition
	New Service. Product: A New Service Installed. Reported Result: 480		Management needs to change the procedure for tracking this activity and separate out the subactivities with disparate products into separate activities. Staff will need to be trained on how to appropriately account for these activities. The SOP should be revised to reflect these changes.	Agree. The new program will have maintenance subactivities with similar products.	Implement.
		Timecards were used to track products for this activity rather than the actual log for New Services Installed		Staff is already logging maintenance activities, and will continue to improve on logs.	Implement.
	Backflow Program. Product: A Backflow Device in Compliance. Reported Result: 3,063	Documentation provided was not sufficient for auditors to confirm the number of tests completed.	Staff needs to work with auditors in the implementation phase of the audit to develop a process for tracking and reporting results for this measure	See answer to SDP 31202 Measure 4, Item 1.	Implement.
		combined to generate results for this activity.	 Management needs to change the procedure for documenting this activity and separate out the sub- activities with disparate products into separate activities. Staff will need to be trained on how to appropriately account for these activities. The SOP should be revised to reflect these changes. 	See answer to Activity 312220, Item 1.	Implement.

Outcome Level	Measure	Summary of Findings	Summary of Recommendations	Department Response	Disposition
Activity 312240	Water Quality Monitoring. Product: A Test Completed. Reported Result: 23,091	The total number of samples recorded in source documents is less than half of the number reported products.	 Program staff needs to work with auditors during the implementation phase of the audit to develop a system to track and reconcile source documents to reported results. 	Agree.	Implement.
		1b. The auditor could not find source documentation for four pages in the Monthly Water Quality Report sent to DHS in June.			
Activity 312260	Administration - Water Distribution System. Product: Work Hour. Reported Result: 1,564.75 Hours.	The product for this Activity is a work hour. Auditors of hours were worked.	do not reconcile activities for which the product is a wor	rk hour because there is no practical method by which	to verify that the
Activity 312300	Customer Services. Product: A Customer Request Completed. Reported Result: 2,480.	Products for this Activity were reported on timecards and then support documentation was filed by street name. There is no practical method by which auditors can reconcile support documentation to timecards.	Program management needs to work with audit staff to create a log or database system to reconcile reported results to supporting documentation.	Agree.	Implement.
Activity 312310	Water Usage Management. Product: A Meter Serviced or Installed. Reported Result	The product as it appears in the MBO, "a meter serviced or installed," is different from that specified in the Activity's SOP, "a water meter serviced."	what is stated in the SOP.	Staff agrees that the MBO product should match the SOP product. For the new program we will make sure that the wording is entered correctly in the system.	Will be resolved in new program structure.
		Products totaled by auditors from logs provided for this Activity totaled 1,595, not the 2,035 reported. It is not clear to auditors what caused this discrepancy.	reported products in the MBO and correct any discrepancies.	Staff will work with the auditors to develop an electronic log for meters serviced. The discrepancy observed with hard copies provided was due to part of the files being discarded due to time elapsed.	Implement.
Activity 312340	Administration. Product: Work Hour. Reported Result: 14,493.10 Hours.	The product for this Activity is a work hour. Auditors do not reconcile activities for which the product is a work hour because there is no practical method by which to verify that the hours were worked.			
Activity 312320	Training. Product: Work Hour. Reported Result: 0 Hours	There were no products for this Activity in FY 2003/2004.	N/A	This activity was not used during FY 03/04. At the time training was charged to subactivity 312342.	N/A